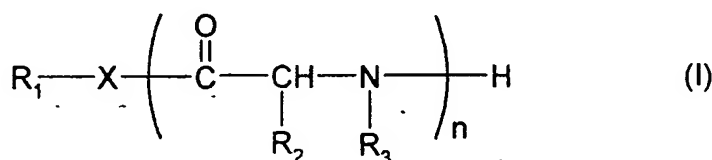


**WHAT IS CLAIMED IS:**

1. An anti-wrinkle composition comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):



in which:

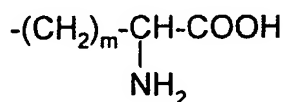
- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals,

- R<sub>1</sub> is chosen from:

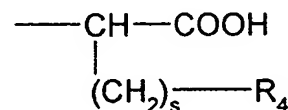
(i) hydrogen,

(ii) linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R'', wherein R' and R'' are chosen, independently of each other, from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals; the C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and

(iii) a radical chosen from



and

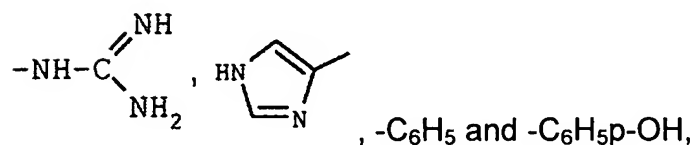


in which:

- m is 1, 2, 3, 4 or 5;

- s is an integer between 0 and 4 inclusive;

- R<sub>4</sub> is chosen from hydrogen, -NH<sub>2</sub>, -OH, -SH, -CHOHCH<sub>3</sub>, -CONH<sub>2</sub>,



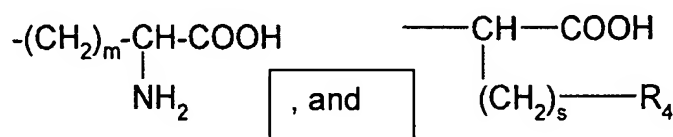
- R<sub>2</sub> is chosen from hydrogen, linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>8</sub> hydrocarbon-based radicals, and a radical chosen from -CH<sub>2</sub>OH, -CHOH-CH<sub>3</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>p-OH and -(CH<sub>2</sub>)<sub>t</sub>-NH<sub>2</sub>, with t being 1, 2, 3, 4 or 5,

- R<sub>3</sub> is chosen from hydrogen, and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals, and

- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.

2. The composition of claim 1, wherein X is chosen from O, S and N-CH<sub>3</sub>.

3. The composition of claim 1, wherein R<sub>1</sub> is chosen from hydrogen, linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>22</sub> hydrocarbon-based radicals, and a radical chosen from:



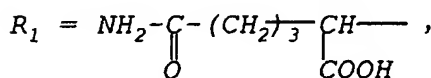
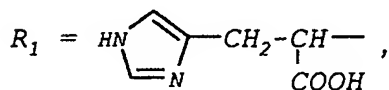
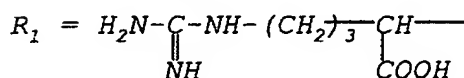
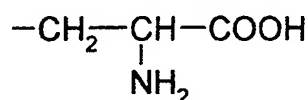
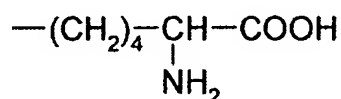
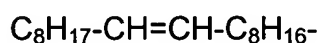
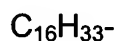
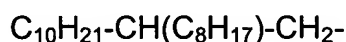
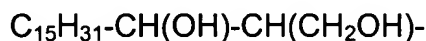
4. The composition of claim 3, wherein R<sub>1</sub> is a C<sub>4</sub>-C<sub>20</sub> hydrocarbon-based radical.

5. The composition of claim 1, wherein  $R_2$  is chosen from hydrogen, linear and branched, saturated and unsaturated  $C_1$ - $C_6$  hydrocarbon-based radicals, and  $-CH_2C_6H_4p-OH$ .

6. The composition of claim 1, wherein  $R_3$  is chosen from hydrogen and linear and branched, saturated and unsaturated  $C_1$ - $C_4$  hydrocarbon-based radicals.

7. The composition of claim 6, wherein  $R_3$  is chosen from methyl and ethyl radicals.

8. The composition of claim 1, wherein  $R_1$  is chosen from:



, and



9. The composition of claim 1, wherein  $n$  is between 3 and 500 inclusive.

10. The composition of claim 1, wherein n is such that the weight average molecular weight of the at least one material is between 300 and 50 000 inclusive.

11. The composition of claim 1, wherein the at least one material is present, alone or as a mixture, in an amount of from 0.001% to 30% by weight relative to the total weight of the composition.

12. The composition of claim 11, wherein the at least one material is present, alone or as a mixture, in an amount of from 0.01% to 15% by weight relative to the total weight of the composition.

13. The composition of claim 1, wherein the physiologically acceptable medium comprises a cosmetically acceptable medium.

14. The composition of claim 1, wherein the physiologically acceptable medium comprises a pharmaceutically acceptable medium.

15. The composition of claim 1, further comprising tensioning agents chosen from proteins, protein hydrolysates, and nucleic acids.

16. The composition of claim 15, wherein the proteins are chosen from milk proteins, plant proteins, and oat derivatives.

17. The composition of claim 16, wherein the milk proteins comprise lactalbumin.

18. The composition of claim 16, wherein the plant proteins comprise soybean protein.

19. The composition of claim 15, wherein the nucleic acids comprise DNA.

20. The composition of claim 1, provided in a form chosen from: solutions chosen from aqueous, aqueous-alcoholic, and oily solutions; emulsions chosen from oil-in-water, water-in-oil, and multiple emulsions, the emulsions having a consistency chosen from liquid and semi-liquid milk consistencies, and soft, semi-solid and solid cream

consistency; gels chosen from aqueous and oily gels; anhydrous products chosen from liquid, pasty and solid anhydrous products; lotion and serum dispersions chosen from aqueous dispersions, oily dispersions, and dispersions in a solvent medium; microemulsions; microcapsules; ionic and nonionic dispersions chosen from microparticles and vesicular dispersions; fluid, thickened, gelled, semi-solid, and soft paste forms; solid forms chosen from sticks and tubes; white creams, coloured creams, ointments, milks, lotions, serums, pastes, and mousses; and aerosols.

21. The composition of claim 1, provided in a form chosen from:

- (i) products for protecting and caring for the skin of the face, the neck, the hands and the body;
- (ii) make-up compositions for body and facial skin;
- (iii) antisen compositions; and
- (iv) artificial tanning compositions.

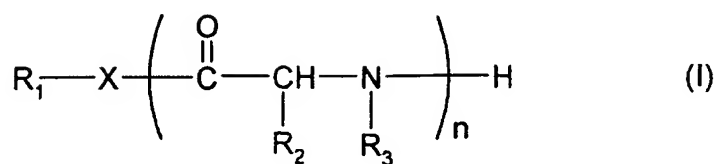
22. The composition of claim 21, wherein the products (i) are chosen from anti-wrinkle and anti-fatigue compositions, for making the skin look radiant.

23. The composition of claim 21, wherein the make-up compositions (ii) are chosen from lipsticks, foundations, tinted creams, and concealer sticks.

24. The composition of claim 1, provided in the form chosen from anti-wrinkle compositions for the skin of the face and the neck.

25. A method for reducing, fading out and/or smoothing out wrinkles and/or fine lines in skin, comprising:

applying to the skin a composition comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):



in which:

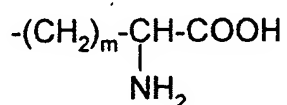
- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals,

- R<sub>1</sub> is chosen from:

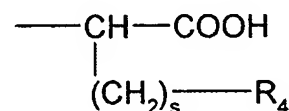
(i) hydrogen,

(ii) linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R'', wherein R' and R'' are chosen, independently of each other, from hydrogen, and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals; the C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and

(iii) a radical chosen from



and

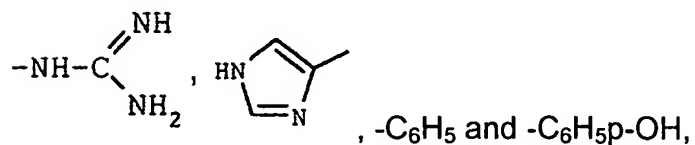


in which:

- m is 1, 2, 3, 4 or 5;

- s is an integer between 0 and 4 inclusive;

- R<sub>4</sub> is chosen from hydrogen, -NH<sub>2</sub>, -OH, -SH, -CHOHCH<sub>3</sub>, -CONH<sub>2</sub>,



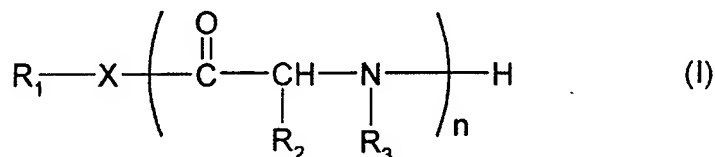
- R<sub>2</sub> is chosen from hydrogen, linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>8</sub> hydrocarbon-based radicals, and radicals chosen from -CH<sub>2</sub>OH, -CHOH-CH<sub>3</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>p-OH and -(CH<sub>2</sub>)<sub>t</sub>-NH<sub>2</sub>, with t being 1, 2, 3, 4 or 5,

- R<sub>3</sub> is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals, and

- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.

26. A method of manufacturing a pharmaceutical composition for reducing, fading out and/or smoothing out wrinkles and/or fine lines in skin, comprising:

adding to a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):



in which:

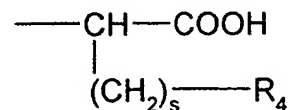
- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals,

- R<sub>1</sub> is chosen from:

(i) hydrogen,

(ii) linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R'', wherein R' and R'' are chosen, independently of each other, from hydrogen and linear and

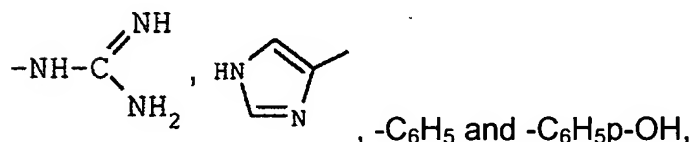
(iii) a radical chosen from



-  $m$  is 1, 2, 3, 4 or 5;

- s is an integer between 0 and 4 inclusive;

- R<sub>4</sub> is chosen from hydrogen, -NH<sub>2</sub>, -OH, -SH, -CHOHCH<sub>3</sub>, -CONH<sub>2</sub>,



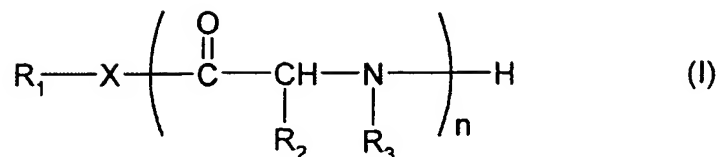
- R<sub>2</sub> is chosen from hydrogen, linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>8</sub> hydrocarbon-based radicals, and radicals chosen from -CH<sub>2</sub>OH, -CHOH-CH<sub>3</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>p-OH and -(CH<sub>2</sub>)<sub>t</sub>-NH<sub>2</sub>, with t being 1, 2, 3, 4 or 5,

- R<sub>3</sub> is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals, and

- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.

27. A tensioning agent for reducing, smoothing out and/or fading out wrinkles and/or fine lines in skin, comprising, in a physiologically acceptable medium, at least one material chosen from polymers and salts thereof, of formula (I):





in which:

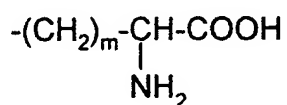
- X is chosen from -O-, -S- and -NR, wherein R is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals,

- R<sub>1</sub> is chosen from:

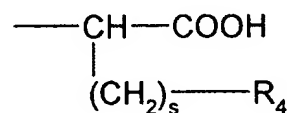
(i) hydrogen,

(ii) linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals, optionally substituted with at least one group chosen from hydroxyl and -NR'R'', wherein R' and R'' are chosen, independently of each other, from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals; the C<sub>1</sub>-C<sub>40</sub> hydrocarbon-based radicals being optionally interrupted with at least one hetero atom chosen from N, O and Si, and

(iii) a radical chosen from



and

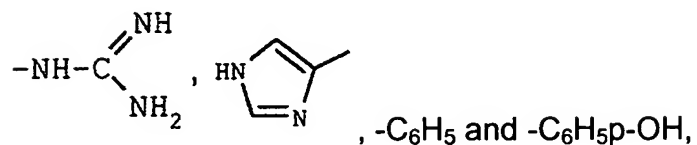


in which:

- m is 1, 2, 3, 4 or 5;

- s is an integer between 0 and 4 inclusive;

- R<sub>4</sub> is chosen from hydrogen, -NH<sub>2</sub>, -OH, -SH, -CHOHCH<sub>3</sub>, -CONH<sub>2</sub>,



- R<sub>2</sub> is chosen from hydrogen, linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>8</sub> hydrocarbon-based radicals, and radicals chosen from -CH<sub>2</sub>OH, -CHOH-CH<sub>3</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>, -CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>p-OH and -(CH<sub>2</sub>)<sub>t</sub>-NH<sub>2</sub>, with t being 1, 2, 3, 4 or 5,

- R<sub>3</sub> is chosen from hydrogen and linear and branched, saturated and unsaturated C<sub>1</sub>-C<sub>6</sub> hydrocarbon-based radicals, and

- n is an average number of repeating units of greater than 1, such that the weight average molecular weight of the at least one material is between 200 and 200 000 inclusive, the repeating unit being either identical for the same material, or different.